ABSTRACT OF THE DISCLOSURE

[1175]   We propose a new form of software transactional memory (STM) designed to support dynamic-sized data structures, and we describe a novel non-blocking implementation. The non-blocking property we consider is *obstruction-freedom*. Obstruction-freedom is weaker than lock-freedom; as a result, it admits substantially simpler and more efficient implementations. An interesting feature of our obstruction-free STM implementation is its ability to use of modular contention managers to ensure progress in practice.